

REMARKS

This is in response to the Office Action mailed on September 8, 2004, and the references cited therewith.

No claims are amended or cancelled. Claims 1-23 remain pending in this application.

Objection to the Drawings

The drawings were objected to as including reference characters not mentioned in the description. Reference to the ENABLE signal shown in Figure 3 has been added to the description as indicated above. Applicant respectfully submits that no new matter is added by this amendment.

The drawings were also objected to as not showing every feature of the invention specified in the claims. The objection stated that "features as recited in claims 11-12 and 16-17 must be shown."

Applicant directs the Examiner to page 11 lines 15-25 of the specification and related Figure 2A which describe at least one example of material described in claims 11-12 and 16-17. A platinum layer 219 is described. A control gate 216 is described, that includes platinum in one embodiment. A ferroelectric dielectric 218 is described between elements 216 and 219. Further, a polysilicon gate 208 is described over a gate dielectric 210.

Applicant respectfully submits that this example, among other examples in the specification supports the material in claims 11-12 and 16-17. Reconsideration and withdrawal of the objection is respectfully requested.

Double Patenting Rejection

Claims 10-17 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-61 of U.S. Application No. 10/177,082. Applicants will consider filing a terminal disclaimer at a later date (e.g. when the claims are otherwise allowed).

§112 Rejection of the Claims

Claims 1-23 were rejected under 35 USC § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The rejection states that, “it is not understood how the circuit in Fig. 3 can be operated properly since the connective relationship of the terminals of the three transistors in DRAM sense amplifier 310 and the terminals of the transistor 324 are not completely described.” Applicant respectfully submits that enablement under 35 USC § 112, first paragraph does not require all such details.

35 USC § 112, first paragraph requires enough detail “to enable one skilled in the pertinent art to make and use the claimed invention.” “The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.” MPEP § 2164.01.

Applicant respectfully submits that the level of detail necessary in the present application for construction and operation of a sense amplifier were known to one of ordinary skill in the art. Further, the present specification incorporates by reference U.S. Pat. Nos. 5,627,785; 5,280,205; and 5,042,011 regarding operation of sense amplifiers on page 15, lines 25-26.

Reconsideration and withdrawal of the 35 USC § 112, first paragraph rejection is respectfully requested.

§102 Rejection of the Claims

Claims 10-17 were rejected under 35 USC § 102(e) as being anticipated by Forbes et al. (U.S. 6,337,805). Applicant traverses the rejection for at least the following reasons. The rejection states that Forbes “discloses in Fig. 6(a) a memory array including: array plate 116; first capacitor 120 of semiconductor oxide electric; second ferroelectric capacitor 118.”

Forbes appears to show a sourceline 116, however, applicant is unable to find an array plate in Forbes. In contrast, claims 10 and 15 include an array plate. Because Forbes does not

show every element of Applicant's independent claims, a 35 USC § 102(e) rejection is not supported. Reconsideration and withdrawal of the rejection are respectfully requested with respect to Applicant's independent claims 10 and 15. Additionally, reconsideration and withdrawal of the rejection are respectfully requested with respect to the remaining claims that depend therefrom as depending on allowable base claims.

§103 Rejection of the Claims

Claims 1-9, and 18-23 were rejected under 35 USC § 103(a) as being unpatentable over Nakao et al. (U.S. 5,303,182) in view of Fujiki et al. (U.S. 6,194,228). Applicant traverses the rejection for at least the following reasons.

The rejection does not specifically point out elements that are believed to correspond to elements of Applicant's claims. Nakao appears to show a conductor film 15, a ferroelectric film 16, and a top electrode 17. However, Nakao does not show, teach or suggest a dielectric layer located over the channel region with a gate electrode located over the dielectric layer; a ferroelectric dielectric coupled to the gate electrode; and a control electrode coupled to the ferroelectric dielectric.

Fujiki appears to show a gate oxide 13 with a gate electrode 14 located over the gate oxide 13. However, Fujiki does not show, teach or suggest anything located over or coupled to the gate electrode 14. Assuming a combination of Nakao and Fujiki were proper, Applicant is unable to find any showing or suggestion in either Nakao or Fujiki to provide a dielectric layer located over the channel region with a gate electrode located over the dielectric layer; a ferroelectric dielectric coupled to the gate electrode; and a control electrode coupled to the ferroelectric dielectric. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143.

Because the cited references, either alone or in combination, do not show every element of Applicant's independent claims, a 35 USC § 103(a) rejection is not supported by the references. Reconsideration and withdrawal of the rejection are respectfully requested with respect to Applicant's independent claims 1, 7, 18, and 21. Additionally, reconsideration and

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withdrawal of the rejection are respectfully requested with respect to the remaining claims that depend therefrom as depending on allowable base claims.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6944 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 10 day of November, 2004.

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Signature